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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,574	12/20/2001	Yuri Iwano	1907-0205P	5010

2292 7590 06/27/2003

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

SONG, JASMINE

ART UNIT	PAPER NUMBER
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2188

DATE MAILED: 06/27/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/018,574	Applicant(s) IWANO, YURI	
	Examiner Jasmine Song	Art Unit 2188	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2 and 6</u> . | 6) <input type="checkbox"/> Other: _____ |

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Detailed Action

1. Claims 1-7 are represented for examination.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 12/20/2001 and 04/11/2003 have been considered by the examiner.

Title

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Drawings

5. Figures 1-2 and 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to

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avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Oath/Declaration

6. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in 37 C.F.R. 1.63.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuba et al., U.S. Patent 5,806,072.

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Regarding claim 1, Kuba teaches that a disk medium managing method for managing data to be recorded on a disk medium (col.14, lines 11-18) by file format (Fig.5 and 6) and representing a hierarchical structure by directories (Fig.5 and 6, col.14, lines 66 to col.15, lines 35), wherein an area (Fig.5 and 6, subdirectory b) on the disk medium is ensured as a directory (col.15, lines 1-11) to limit recording location of files and directories defined under the directory (Fig.5 and 6, col.15, lines 3-35 and lines 55-58).

Regarding claim 2, Kuba teaches that wherein it is capable of hierarchically defining a further directory (Fig.5 and 6, subdirectory d) for ensuring an area (files within the subdirectory d) within the area ensured on the disk medium (Fig.5 and 6, subdirectory b) as the directory.

Regarding claim 3, Kuba teaches that wherein it is capable of selectively deciding whether the area is ensured on the disk medium or not (col.15, lines 1-3).

Regarding claim 4, Kuba teaches that wherein hierarchical definition of the directory for ensuring the area on the disk medium (Fig.5 and 6, subdirectory b) is restricted (col.15, lines 1-3) by that the directory must be defined under a directory (Fig.5 and 6, root directory) having ensured an area on the disk medium.

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Regarding claim 5, Kuba teaches that wherein the area ensured on the disk medium is continuously arranged thereon is taught as the files E.F.G within subdirectory b are continuous area as shown in the Fig.6.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuba et al., U.S. Patent 5,806,072, in view of Walker., U.S. Patent 6134586.

Regarding claims 6 and 7, Kuba teaches the claimed invention as noted above (claim 1), Kuba does not teach that calculating a maximal time of seeking data in the areas ensured on the disk medium and specifying a maximal allowable time of seeking data in an area to be ensured on the disk medium and calculating an area on the disk medium satisfying the specified allowable seek time as disclosed in the Specification, page 18 to 19. Walker teaches that calculating a maximal time of seeking data in the areas ensured on the disk medium (the maximum seek time as disclosed in the col.3, lines 22-23 and col.4, lines 17-18) and specifying a maximal allowable time of seeking data in an area to be ensured on the disk medium (the maximum average seek time as disclosed in the col.3, lines 27-32) and calculating an area on the disk medium satisfying the specified allowable seek time is taught as the maximum average seek

time can be reduced to about half the maximum seek time (col.3, lines 30-32).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Walker in the system of Kuba and utilize the longest seek time for seeking the data in the area on the disk and make sure the time to record the data between two different locations is less than the specified allowable seek time because it would reduce the seek time by dividing up the storage area of the disk into multiple-ring shaped zones (col.3, lines 27-32) and provide the maximum efficiency of reading or writing.

Accordingly, one of ordinary skill in the art would have recognized this and concluded that they are from the same field of endeavor. This would have motivated one of ordinary skill in the art to implement the above combination for the advantage set forth above.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Factor et al., U.S. Patent 6094706 teaches that a method and apparatus for resolving access patterns in a data processing system using the pigeon hole principle.

Dewitt et al., U.S. Patent 5732265 teaches that a storage optimizing encoder and method.

Okuda., U.S. Patent 5740445 teaches that an information processing apparatus for generating directory information to manage a file using directories.

Kuno et al., U.S. Patent 6378031 B1 teaches that a data processing apparatus and file management method therefor.

Igarashi et al., U.S. Patent 6122646 teaches that a method and apparatus for management of information where sub directory information in directory identifies the relative recording location of the sub directory.

12. When responding to the office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. 1.111 (c).

13. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.


14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasmine Song whose telephone number is 703-305-7701. The examiner can normally be reached on 8:00-4:30.

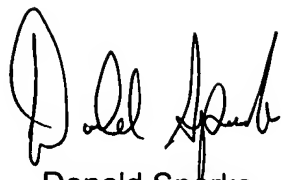
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on 703-308-1756. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

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Jasmine Song 
Patent Examiner
June 25, 2003


Donald Sparks
Supervisory Patent Examiner
Technology Center 2100

IMPORTANT NOTICE

The Examiner's art unit number has changed from 2187 to 2188 due to the recent realignment of workgroup 2180. Please use art unit 2188 on all correspondence related to this case.
